TECHNICAL NOTES

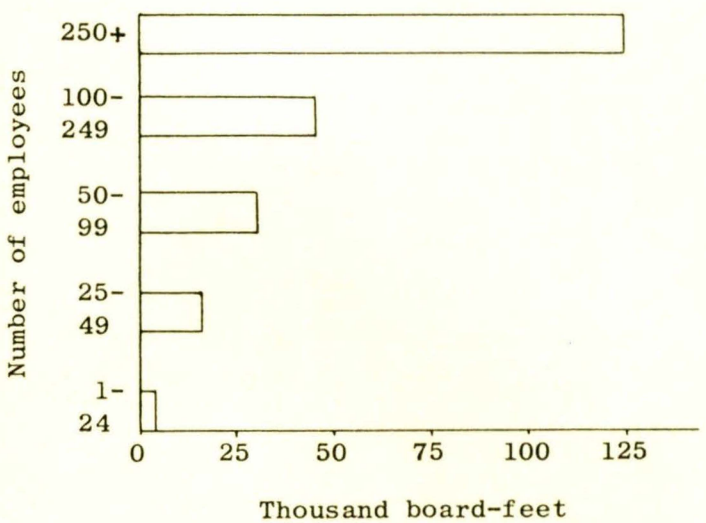
LAKE STATES FOREST EXPERIMENT STATION
U.S. DEPARTMENT OF AGRICULTURE · · FOREST SERVICE

No. 499

The Twin Cities Primary Metal Industries as Users of Wood

There are approximately 38 firms classified as Primary Metal Industries[1/] within the city limits of Minneapolis and St. Paul. During 1956 about one-half of these purchased lumber for use in their manufacturing process, primarily for patterns, flasks, bottomboards, and wedges, and to a lesser degree for shipping crates, boxes, skids, and pallets.

How much wood does this industry group use?--The total amount of lumber purchased by firms of this industry group during 1956 is estimated at about 220,000 board-feet[2/]. The biggest wood users were the larger firms, with the 3 largest accounting for more than 55 percent of the total.



Firm size	Firms in sample	Known firms
250+	3	3
100-249	2	3
50-99	7	7
25-49	5	7
1-24	18	18

1/ This classification is based on the standard industrial classification, which divides all industry into 20 major groups. The Primary Metal Industries include iron and steel foundries, nonferrous foundries, furnace and steel works, and firms engaged in the secondary smelting of nonferrous metals. The source of the listing used for this study was the 1955 Minnesota Directory of Manufacturers as tabulated and published by the Minnesota Department of Business Development. Data were developed from interview contacts made by the Division of Forestry of the Minnesota Conservation Department.

2/ The standard error is ± 4 percent--that is, the chances are 2 out of 3 that the estimate does not deviate from the true figure by more than 9,000 board-feet.

JULY 1957

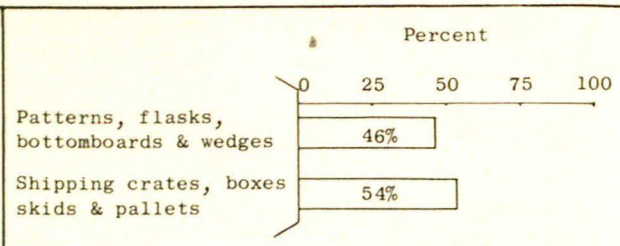
JOHN R. WARNER, Research Forester

(Over)

MAINTAINED AT ST. PAUL 1, MINNESOTA, IN COOPERATION WITH THE UNIVERSITY OF MINNESOTA

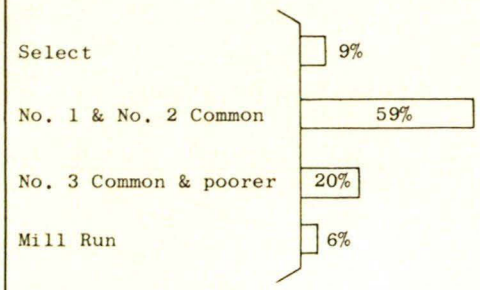
What is the wood used for?

Manufacturing and shipping, and storage consume nearly equal volumes of lumber purchased. Wedges, though a minor use of this lumber, are utilized in quantity by foundries and are usually purchased already manufactured from foundry supply houses.



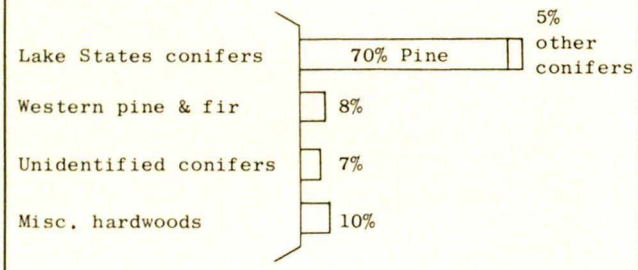
What quality of wood is used?

Good quality wood is requisite in pattern making, but is not a requirement in other uses. Bottomboards and wedges are good outlets for rough low-grade lumber. The distribution of softwood grades including aspen is pictured on the right. The 6 percent not shown was No. 3 Common miscellaneous hardwoods.



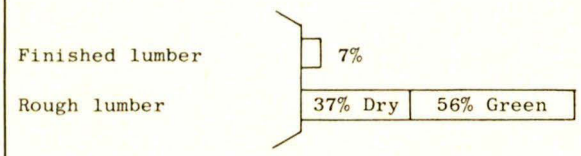
What species are used?

The softwoods, particularly pine, are favored. Ninety percent of volume used were coniferous species, 10 percent broadleaf. Less than 1 percent of the coniferous group was southern pine; nearly 40 percent of the broadleaf group was aspen.



In what form is it purchased?

Nearly all purchases were lumber, with one minor purchase of dimension and no blocking. Of the finished lumber 70 percent was air-dry, 30 percent kiln-dried. Only 3 percent of the rough lumber was kiln-dried.



Where is it obtained?

Local dealers supplied 88 percent; 6 percent was purchased directly from sawmills. Origin of the remaining 6 percent is unknown.